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Streambank Protection Project  
Perley Brook  
Fort Kent, Maine

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# **Operation and Maintenance Manual**

October 1990



**US Army Corps  
of Engineers**  
New England Division

OPERATION AND MAINTENANCE MANUAL  
EMERGENCY STREAMBANK PROTECTION PROJECT  
PERLEY BROOK  
FORT KENT, MAINE

FOREWORD

The Perley Brook streambank protection project, consisting of stone and gabion slope protection and the removal of a shoal areas was designed and constructed to stabilize the streambank along the Maine Route 161 highway and prevent further erosion of the highway embankment. The successful functioning of the streambank stabilization works is not assured solely by the construction of the stone and gabion slope protection along the streambank since the forces of nature, in this case, high velocity flows and flood stages will continue to attack the streambank. If the system is to perform the functions for which it was designed, it must be carefully maintained not only during periods of normal flow stages, but also during subsequent flood periods.

The purpose of this manual is to provide information regarding actual maintenance procedures and outline the responsibilities of the parties involved. In general, the regulations assess non-Federal interests as having responsibility for operation and maintenance of the project. Therefore, the town of Fort Kent, Maine should assure that several local individuals be familiar with this project and have a thorough understanding of the recommended methods of maintaining the system.

The general flood control Regulations for Operation and Maintenance of Flood Control Works quoted herein were approved by the acting Secretary of War on 9 August 1944. Established by the Department of Defense, the improvement of rivers and harbors and other waterways for flood control and other purposes, formerly under jurisdiction of the Secretary of War, became the responsibility of the Secretary of the Army. References herein to the Secretary of War and War Department shall be construed to mean, respectively, the Secretary of the Army and the Department of the Army. Where reference is made to the District Engineer in the Regulations included in this manual, it shall be construed to mean the Division Engineer, New England Division, Corps of Engineers.

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FORT KENT, MAINE

TABLE OF CONTENTS

Paragraph	Title	Page No.
SECTION I - INTRODUCTION		
1	AUTHORIZATION	1
2	LOCATION	1
3	DESCRIPTION OF DAMAGE	1
4	DESCRIPTION OF PROJECT	1
5	PROTECTION PROVIDED	2
6	CONSTRUCTION HISTORY	2
7	ASSURANCES OF LOCAL COOPERATION	2
8	PLANS	2
SECTION II - GENERAL REGULATIONS		
9	PURPOSE OF THIS MANUAL	3
10	GENERAL RULES AND REGULATIONS	3
11	MAINTENANCE	5
12	OPERATION	6
13	REPORTS	6
SECTION III - STREAMBANK PROTECTION		
14	DESCRIPTION	8
15	MAINTENANCE	8
16	OPERATION	9
APPENDICES		
A	REGULATIONS PRESCRIBED BY THE SECRETARY OF WAR	
B	ASSURANCE OF LOCAL COOPERATION	
C	INSPECTION REPORT FORMS	
D	AS-BUILT DRAWINGS	

## SECTION I

### INTRODUCTION

#### 1. AUTHORIZATION

The construction of the streambank stabilization project along Perley Brook in the town of Fort Kent, Maine, was authorized by the Chief of Engineers on August 24, 1988, pursuant to the authority contained in Section 14 of the 1946 Flood Control Act, as amended.

#### 2. LOCATION

Fort Kent, Maine, is located in northern Aroostook County, about 50 miles northwest of Presque Isle, Maine, at the United States-Canada border. The erosion site is located at the Maine Route 161 highway embankment about 500 feet upstream from the Fish River confluence.

#### 3. DESCRIPTION OF DAMAGE

The problem area involved erosion conditions caused by high stream stages, principally during the spring runoff periods, threatening destruction of the Route 161 highway embankment, adjacent to two 12'-6" x 13'-10" corrugated metal pipe (CMP) culverts that carry Perley Brook under the roadway. The current erosion is immediately adjacent to a concrete highway boundary marker at the base of the embankment slope. The erosion area extends upstream about 100 linear feet.

There are two primary reasons why the erosion has occurred and will continue if protective measures are not constructed. First, the entrance to the highway culverts is not direct and streamflows are directed toward the problem area before entering the culverts. This also causes shoaling to partially block the culvert entrances thereby accelerating the erosion condition. Secondly, about 300 feet upstream from the culverts, Perley Brook makes a 90 degree turn. At this location, riverbank materials from an exposed 40-foot high embankment are eroded and carried to two separate areas where they are deposited adjacent to the riverbank. This basically causes the stream to make an "S" bend before entering the culverts. Although the highway embankment is about 20 feet high at the culverts, the erosion area which is subject to the improvement noted in the report is only about ten feet high due to the sloping highway grade. The principal shoal area is approximately 1,500 ft.<sup>2</sup> and two to four feet high.

#### 4. DESCRIPTION OF PROJECT

The project consists of the following:

- a. 100 linear feet of stone slope protection placed on a one vertical to a two horizontal slope.

b. Gabion slope protection at the culvert entrance placed on a one vertical to 1-3/4 horizontal slope to match the existing road embankment.

c. Removal of a shoal area approximately 1500 ft<sup>2</sup> to improve channel alignment upstream from the highway culverts.

#### 5. PROTECTION PROVIDED

The streambank stabilization will prevent further erosion of the embankment along Perley Brook to maintain the integrity of Maine Route 161 highway.

#### 6. CONSTRUCTION HISTORY

The project was constructed by Ed Pelletier & Sons Co., of Madawaska, Maine during the period from December 1988 to February 1990 at a cost of \$54,634.

#### 7. ASSURANCES OF LOCAL COOPERATION

The Army Corps of Engineers and the town of Fort Kent entered into an agreement for local cooperation for this streambank stabilization project on August 24, 1988. The agreement provides that the local sponsor shall, among other required responsibilities, maintain the project after its completion without cost to the Federal Government. A copy of the formal local assurances is included as Appendix B.

#### 8. PLANS

A reduced size drawing showing the project as actually constructed is included as Appendix D.

## SECTION II

### GENERAL REGULATIONS

#### 9. PURPOSE OF THIS MANUAL

The purpose of this manual is to present detailed information to be used as a guide in complying with "Flood Control Regulations - Maintenance and Operation of Flood Control Works" as approved by the Acting Secretary of War on 9 August 1944, and published in this volume as Appendix A. In executing assurances of local cooperation, the town of Fort Kent has agreed to maintain and operate the completed works in accordance with these regulations. The regulations which are intended to cover all local protection projects constructed by the Department throughout the United States are general in nature, and obviously cannot give detailed instructions for the maintenance and operation of a specific project. The details set forth in this manual for maintenance and operation for the Fort Kent project are intended to supplement the regulations to permit obtaining all the benefits and protection against erosion for which the project was designed. Failure to maintain and operate the project as required by the regulations and as detailed herein could cause property losses and could result in an irreparable loss of confidence in the bank protection system.

#### 10. GENERAL RULES AND REGULATIONS

Paragraph 208.10 (a) of the regulations prescribed by the Secretary of War gives general rules for the maintenance and operation of structures and facilities constructed by the United States for local protection. Applicable portions are quoted below to avoid the necessity for cross reference and are further defined by remarks under each quotation.

"(1) The structures and facilities constructed by the United States for local flood protection shall be continuously maintained in such a manner and operated at such times and for such periods as may be necessary to obtain the maximum benefits;"

These requirements cannot be overstressed, and the town authorities must make adequate provisions for funds, personnel, equipment and materials to allow for the proper maintenance and operation of the streambank protective works.

"(2) The State, political subdivision thereof, or other responsible local agency, which furnished assurance that it will maintain and operate flood control works in accordance with the regulations prescribed by the Secretary of War, as required by law, shall appoint a permanent committee consisting of or headed by an official hereinafter called the "Superintendent", who shall be responsible for the development and maintenance of, and directly in charge of, an organization responsible for the efficient operation and maintenance of all of the structures and facilities during flood periods and for continuous inspection and maintenance of the project works during periods of low water, all without cost to the United States;"

The committee should be composed of competent members, preferably persons experienced in engineering or construction works. The committee must be given broad authority to carry out its responsibilities. The name, address and office and home telephone numbers of the Superintendent, and any changes thereof, shall be promptly furnished to the Division Engineer, New England Division, Corps of Engineers.

(3) N/A

"(4) No encroachment or trespass which will adversely affect the efficient operation or maintenance of the project works shall be permitted upon the right-of-ways for the protective facilities;"

Right-of-ways and easements have been established for which access to the project can be provided in order to allow equipment which may be necessary to perform the maintenance of the project. These right-of-ways are essential and must be kept open at all times.

"(5) No improvement shall be passed over, under, or through the walls, levees, improved channels or floodways, nor shall any excavation or construction be permitted within the limits of the project right-of-way, nor shall any change be made in any feature of the works without prior determination by the Division Engineer of the War Department or his authorized representative that such improvement, excavation, construction, or alteration will not adversely affect the functioning of the protective facilities. Such improvements or alterations as may be found to be desirable and permissible under the above determination shall be constructed in accordance with standard engineering practice. Advice regarding the effect of proposed improvements or alterations on the functioning of the project and information concerning methods of construction acceptable under standard engineering practice shall be obtained from the Division Engineer or, if otherwise obtained, shall be submitted for his approval. Drawings or prints showing such improvements or alterations as finally constructed shall be furnished the Division Engineer after completion of the work;"

Any contemplated improvements or alterations as outlined above must be submitted to the U.S. Army Corps of Engineers, New England Division, Waltham, Massachusetts, and the approval of the Division Engineer obtained prior to the town authorizing the work. All requests for approval shall be in writing and complete drawings in duplicate. One set, which shall be in reproducible form, must be submitted along with a full description of the work intended. The town will be held responsible for obtaining prior approval from the Corps of Engineers for any improvements or alterations proposed by itself, private parties or any public parties. The town shall furnish the Division Engineer as-built drawings, in duplicate, of the completed work.

"(6) It shall be the duty of the Superintendent to submit a semi-annual report to the Division Engineer covering inspection, maintenance, and operation of the protective works;"

See paragraph 13 of this Section for instructions on submitting reports.

"(7) The Division Engineer or his authorized representatives shall have access at all times to all portions of the protective works;"

The Division Engineer or his representatives will make periodic inspections of the protective works to determine if the project is being properly maintained and operated by the town.

"(8) Maintenance measures or repairs which the Division Engineer deems necessary shall be promptly taken or made;"

The town should maintain the facilities and keep them in good repair and not wait for the Division Engineer to call such matters to its attention. Upon request, the Division office will advise the town how to make any major repairs to the facilities.

"(9) Appropriate measures shall be taken by local authorities to insure that the activities of all local organizations operating public or private facilities connected with the protective works are coordinated with those of the Superintendent's organization during flood periods;"

The project is designed to provide bank stabilization and to protect the Maine Route 161 highway embankment against erosion. It does not provide protection against flooding and therefore, it may be necessary to curtail uses during periods of flooding.

"(10) The War Department will furnish local interests with an Operation and Maintenance Manual for each completed project, or separate useful part thereof, to assist them in carrying out their obligations under these regulations;"

The flood control committee should familiarize itself with the contents of this manual. The town authorities are encouraged to call on the Division Office of the Corps of Engineers for any additional advice or instructions required by them in carrying out the town's obligations for maintaining and operating the protection facilities.

## 11. MAINTENANCE

a. The word "maintenance" as used in this manual applies to the upkeep, repair, replacement and care of the work constructed by the United States and turned over to the town. If the work is neglected there will be deterioration and possible failure in flood time when there is dire need of dependable protection.

b. Maintenance includes a regular walking inspection over the entire system. The purpose of the inspection is to detect any deterioration of project features that indicates a need for repair or replacement, and also to detect any restrictions in the stream, channel or floodway that reduces flow capacity.



## 12. OPERATION

a. The term "operation" as used in this manual, refers to the actual functions of the various features of the protection works during abnormal river stages.

b. When abnormal river stages are expected, it is important that the Superintendent make immediate decisions, take prompt action and has the authority to carry out his decisions to insure proper continued operation of the protection works.

c. To insure correct operation, the following items are considered to be essential:

(1) At least one person (preferably 2 or 3) be familiar with the protection works including the various types of materials comprising the streambank protection works.

(2) The sources of these materials should be established ahead of time. If possible a small amount of each type of material should be stockpiled nearby for quick use.

(3) Sufficient loading, hauling and placing equipment should be readily available for providing and placing the repair materials.

(4) Sufficient experienced personnel should be readily available for patrolling and performing the repair work.

## 13. REPORTS

a. The regulations prescribed by the Secretary of the Army call for semi-annual reports to be submitted by the Superintendent to the Division Engineer covering inspection and maintenance. Inspection of the protective facilities shall be made immediately prior to flood seasons, immediately following floods, and otherwise at intervals not exceeding 90 days as required by regulations.

b. To assist the Superintendent in making his inspection, a sample form is included in Appendix C. The Superintendent shall have additional copies printed for use in submitting his reports.

c. The semi-annual reports shall be submitted in triplicate to the Division Engineer each May and November. The reports will be submitted in letter form with copies of the inspection forms covering the inspections made during the period of the reports. The reports shall cover the following points:

(1) A description of the maintenance work performed in the preceding six months.

(2) The number and classification of men working on maintenance, regularly and intermittently.

(3) Description of any work performed by contract on the repair or improvements of the project.

### SECTION III

#### STREAMBANK PROTECTION WORK

##### 14. DESCRIPTION

The project consists of the following:

a. 100 linear feet of stone slope protection placed on a one vertical to a two horizontal slope.

b. Gabion slope protection at the culvert entrance placed on a one vertical to 1-3/4 horizontal slope to match the existing road embankment.

c. Removal of a shoal area approximately 1500 ft.<sup>2</sup> to improve channel alignment upstream from the highway culverts.

##### 15. MAINTENANCE

Paragraph 208.10(g) (1) of the prescribed regulations sets forth rules for the maintenance of channels and floodways. These rules are quoted below, followed by brief comments where applicable to clarify these rules as they apply to the project.

"Channels and Floodways. - (1) Maintenance. - Periodic inspections of improved channels and floodways shall be made by the Superintendent to be certain that:"

"(i) The channel or floodway is clear of debris, weeds and wild growth;"

All debris and vegetative growth except grasses, at the protective work shall be removed promptly. Failure to remove shrub and tree growth could eventually lead to structural damage to the stone and gabion slope protection from the root systems.

"(ii) The channel or floodway is not being restricted by the depositing of waste materials, building of unauthorized structures or other encroachments;"

Dumping of waste materials or any types of encroachment on the protective work shall be prohibited and prompt steps shall be taken to remove or have removed any such encroachments.

"(iii) The capacity of the channel or floodway is not being reduced by the formation of shoals;"

Shoal areas should be removed, but care should be exercised that slopes of the channel and existing banks are not undercut or damaged. Existence of shoal areas will be apparent from inspections during time of low flow.

"(iv) Banks are not being damaged by rain or wave wash and that no sloughing of banks has occurred;"

Banks shall be inspected for damage by rain or wave wash or by sloughing and repaired promptly using materials similar to that used in their original construction. Inspections shall be made at intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections.

"(v) Stone and gabion sections are in good condition;"

The stone and gabion slope protection must be maintained in good condition to resist erosion. Any damage or loss of stone due to slides or vandalism must be promptly corrected. Periodic checks should be made of the stone and gabion slope protection to detect movement, damage or losses; and prompt corrective action should be taken. Such inspection shall be made at intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections.

(vi) N/A

#### 16. OPERATION

Paragraph 208.10(g)(2) of the prescribed regulations gives rules for operation of channel and floodways. These rules are paraphrased below with regard to the project.

(1) Operation. The bank of the stream along the project area shall be patrolled during periods of high water and measures taken to protect those reaches being attacked by the current. Immediate appropriate measures shall be taken to prevent the formation of jams of ice or debris, and large objects which become lodged against the bank shall be removed. The project shall be thoroughly inspected immediately following each major high water period. As soon as practicable thereafter, all snags and other debris shall be removed and all damages to the project shall be repaired.

**APPENDIX A**

**REGULATIONS PRESCRIBED  
BY THE  
SECRETARY OF THE ARMY**

LOCAL COOPERATION AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
THE STATE OF MAINE  
FOR CONSTRUCTION OF THE  
PERLEY BROOK STREAMBANK EROSION CONTROL PROJECT  
FORT KENT, MAINE

THIS AGREEMENT entered into this 24 day of Aug 1988, by and between the DEPARTMENT OF THE ARMY (hereinafter referred to as the "Government"), acting by and through the Division Engineer, New England Division and the STATE OF MAINE (hereinafter referred to as "Local Sponsor"), acting by and through its Department of Transportation.

WITNESSETH THAT:

WHEREAS, construction of an emergency streambank protection project on Perley Brook in Fort Kent, Maine, (hereinafter referred to as the "Project") was approved by the Office, Chief of Engineers, 22 August 1988, substantially in accordance with a report entitled "Definite Project Report, Perley Brook, Fort Kent, Maine", pursuant to the authority provided by Section 14 of the Flood Control Act of 1946 (Public Law 79-526 Congress), as amended; and,

WHEREAS, Section 14 of the Flood Control Act of 1946, as amended, limits the amount the Government can expend on a single project to \$500,000; and,

WHEREAS, the Water Resources Development Act of 1986, Public Law 99-662, specifies the cost-sharing requirements applicable to the Project; and

WHEREAS, the Local Sponsor has the authority and capability to furnish the cooperation hereinafter set forth and is willing to participate in project cost-sharing and financing in accordance with the terms of this Agreement;

NOW, THEREFORE, the parties agree as follows:

#### ARTICLE I - DEFINITION

For purposes of this Agreement:

1. The term "project" shall mean construction of 100 feet of stone slope protection along the Route 161 embankment and adjacent streambank just upstream from the culvert entrance under Route 161; gabion slope protection at the culverts and removing shoaled material to align the Perley Brook channel toward the culverts.

2. The term "total project costs" shall mean all costs incurred by the Local Sponsor and the Government directly related to construction of the project. Such costs shall include, but not necessarily be limited to, actual construction costs, costs of applicable engineering and design, supervision and administration costs, costs of project construction contract dispute settlements or awards, and the value of lands, easements, and rights-of-way relocations, and dredged material disposal areas provided for the project by the local sponsor, but shall not include any costs for betterments or operation and maintenance.

3. The term "period of construction" shall mean the time from the advertisement of the first construction contract to the time of acceptance of the project by the Contracting Officer.

4. The term "Contracting Officer" shall mean the Commander of the U.S. Army Engineer Division, New England or his designee.

5. The term "highway" shall mean any highway, thoroughfare, roadway, street, or other public or private road or way.

#### ARTICLE II - OBLIGATIONS OF PARTIES

a. The Government, subject to and using funds provided by the local sponsor and appropriated by the Congress, shall expeditiously construct the Project, applying those procedures usually followed or applied in Federal projects, pursuant to Federal laws, regulations, and policies. The local sponsor shall be afforded the opportunity to review and comment on all contracts, including relevant plans and specifications, prior to the issuance of invitations for bids. The local sponsor also shall be afforded the opportunity to review and comment on all

modifications and change orders prior to the issuance to the contractor of a Notice to Proceed. The Government will consider the views of the local sponsor, but award of the contracts and performance of the work thereunder shall be exclusively within the control of the Government.

b. When the Government determines that the project is complete, the Government shall turn the project over to the local sponsor, which shall accept the project and be solely responsible for operating, maintaining, and rehabilitating the project in accordance with Article VIII hereof.

c. As further specified in Article VI hereof, the local sponsor shall provide, during the period of construction, a cash contribution of 5 percent of total project costs.

d. As further specified in Article III hereof, the local sponsor shall provide all lands, easements, rights-of-way, and dredged material disposal areas, and perform all relocations and alterations of buildings, utilities, highways, railroads, bridges (other than railroad bridges and approaches thereto), sewers, and related and special facilities determined by the Government to be necessary for construction of the project.

e. If the value of the contributions provided under paragraphs c. and d. of this Article represents less than 25 percent of total project costs, the local sponsor shall provide during the period of construction an additional cash contribution in the amount necessary to make its total contribution equal to 25 percent of total project costs.

f. The local sponsor shall assume responsibility for all costs in excess of the Federal statutory limitation of \$500,000.

g. No less than once each year the local sponsor shall inform affected interests of the limitations of the protection afforded by the project.

h. The local sponsor shall publicize flood plain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their guidance and leadership in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project.



ARTICLE III - LANDS, FACILITIES, AND RELOCATION ASSISTANCE

a. Prior to the advertisement of any construction contract, the local sponsor shall furnish to the Government all lands, easements, and rights-of-way, including suitable borrow and dredged material disposal areas, as may be determined by the Government to be necessary for construction of the Project, and shall furnish to the Government rights-of-entry to all such lands.

b. The local sponsor shall provide or pay to the Government the full cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, determined by the Government to be necessary for construction of the project.

c. Upon notification from the Government, the local sponsor shall accomplish or arrange for accomplishment at no cost to the Government all alterations and relocations of buildings, highways, railroads, bridges (other than railroad bridges and approaches thereto), storm drains, utilities, cemeteries, and other facilities, structures, and improvements determined by the Government to be necessary for construction of the project.

d. The local sponsor shall comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, approved January 2, 1971, in acquiring lands, easements and rights-of-way for construction and subsequent operation and maintenance of the project and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

ARTICLE IV - VALUE OF LANDS AND FACILITIES

a. The value of the lands, easements, and rights-of-way to be included in total project costs and credited toward the local sponsor's share of total project costs will be determined in accordance with the following procedures:

1. If the lands, easements, or rights-of-way are owned by the local sponsor as of the date this Agreement is signed, the credit shall be the fair market value of the interest at the time such interest is made available to the Government for construction of the project. The fair market value shall be determined by an appraisal, to be obtained by the local sponsor, which has been prepared by an independent

and qualified appraiser who is acceptable to both the local sponsor and the Government. The appraisal shall be reviewed and approved by the Government.

2. If the lands, easements, or rights-of-way are to be acquired by the local sponsor after the date this Agreement is signed, the credit shall be the fair market value of the interest at the time such interest is made available to the Government for construction of the project. The fair market value shall be determined as specified in subparagraph 1. above. If the local sponsor pays an amount in excess of the appraised fair market value, it may be entitled to a credit for the excess if the local sponsor has secured prior written approval from the Government of its offer to purchase such interest.

3. If the local sponsor acquires more lands, easements, or rights-of-way than are necessary for project purposes, as determined by the Government, then only the value of such portions of those acquisitions as are necessary for project purposes shall be included in total project costs and credited to the local sponsor's share.

4. Credit for lands, easements, and rights-of-way in the case of involuntary acquisitions which occur within a one-year period preceding the date this Agreement is signed or which occur after the date this Agreement is signed will be based on court awards, or on stipulated settlements that have received prior Government approval.

5. For lands, easements, or rights-or-way acquired by the local sponsor within a five-year period preceding the date this Agreement is signed, or any time after this agreement is signed, credits provided under this paragraph will also include the actual incidental costs of acquiring the interest, e.g... closing and title costs, appraisal costs, survey costs, attorney's fees, plat maps, and mapping costs, as well as the actual amounts expended for payment of any Pub. L.91-646 relocation assistance benefits provided in accordance with the obligations under this Agreement.

b. The costs of relocations or modifications of utilities or facilities that will be included in total project costs and credited towards the local sponsor's share of total project costs shall be that portion of the actual costs incurred by the local sponsor as set forth below, subject to Government review and approval:

1. Highways and Highway bridges: Only that portion of the cost as would be necessary to construct substitute bridges and highways to the design standard that the State of Maine would use in constructing a new bridge or highway under similar conditions of geography and traffic loads.

2. Utility Facilities (Including Railroads)  
Actual relocation costs, less depreciation, less salvage value, plus the cost of removal, less the cost of betterments. With respect to betterments, new materials shall not be used in any relocation or alteration if materials of value and usability equal to those in the existing facility are available or can be obtained as salvage from the existing facility or otherwise, unless the provision of new material is more economical. If despite the availability of used material, new material is used, where the use of such new material represents an additional cost, such cost shall not be included in total project costs.

#### ARTICLE V - CONSTRUCTION PHASING AND MANAGEMENT

a. To provide for consistent and effective communication between the local sponsor and the Government during the term of construction, the local sponsor and the Government shall appoint representatives to coordinate on scheduling, plans, specifications, modifications, contract costs, and other matters relating to construction of the Project.

b. The representatives appointed above shall meet as necessary during the term of project construction and shall make such recommendations as they deem warranted to the Contracting Officer.

c. The Contracting Officer shall consider the recommendations of said representatives in all matters pertaining to the project, but the Contracting Officer, having ultimate responsibility for construction of the project, has complete discretion to accept, reject, or modify the recommendations.

#### ARTICLE VI - ABILITY TO PAY-NON-FEDERAL COST SHARE

A. The project does not qualify for a revision to the non-Federal cost share for flood control based on estimated flood control benefits and costs and on application of guidelines published as Flood Control Cost Sharing Requirements Under the Ability to Pay Provision; Interim Final Rule (Vol. 52 Federal Register pages 35872-35892, 1987

to be codified at (33 C.F.R., Sections 241.1-.6), implementing Section 103(m) of the Water Resources Development Act of 1986. The analysis leading to this conclusion is shown in Exhibit B. This exhibit documents that the local sponsor is not eligible for any reduction in their cost sharing requirements as a result of the ability to pay analysis.

#### ARTICLE VII - METHOD OF PAYMENT

a. The local sponsor shall provide, over the term of construction, the amounts required under Article II.c. and II.e. of this Agreement. Total project costs are presently estimated to be \$80,000. In order to meet its share, the local sponsor must provide a cash contribution presently estimated to be \$19,000.

b. The required cash contribution shall be provided as follows: 30 days prior to the award of the first construction contract, the Government shall notify the local sponsor of its estimated share of project costs. Within 15 days thereafter, the local sponsor shall provide the Government the full amount of the required contribution by delivering a check payable to "FAO, USAED, NED" to the Contracting Officer representing the Government. In the event that total project costs are expected to exceed the estimate given at the outset of construction, the Government shall immediately notify the local sponsor of the additional contribution it will be required to make to meet its share of the revised estimate. Within 30 days thereafter, the local sponsor shall provide the Government the full amount of the additional required contribution.

c. The Government will draw on the funds provided by the local sponsor such sums as it deems necessary to cover contractual and in-house fiscal obligations attributable to the project as they are incurred, as well as project costs incurred by the Government prior to initiation of construction.

d. Upon completion of the project and resolution of all relevant contract claims and appeals, the Government shall compute the total project costs and tender to the local sponsor a final accounting of its share of total project costs. In the event the total contribution by the local sponsor is less than its required share of total project costs at the time of the final accounting, the local sponsor shall deposit within 90 calendar days after receipt of written notice, a cash payment to the Government of whatever

sum is required to meet its minimum required share of project costs. In the event the local sponsor has made cash contributions in excess of 5 percent of total project costs which result in the local sponsor's having provided more than its required share of total project costs, the Government shall within 90 days of the final accounting, subject to the availability of appropriations, return said excess to the local sponsor; however, the local sponsor shall not be entitled to any refund of the 5 percent cash contribution required pursuant to Article II.c. hereof. If the local sponsor's total contribution under this Agreement (including lands, easements, rights-of-way, relocations, and dredged material disposal areas provided by the sponsor) exceeds 50 percent of total project costs, the Government shall, subject to the availability of appropriations, and subject to the \$500,000 Federal cost limitation, refund the excess to the local sponsor within 90 days of the final accounting.

#### ARTICLE VIII- DISPUTES

Before any party to this Agreement may bring suit in any court concerning an issue relating to this Agreement, such party must first seek in good faith to resolve the issue through negotiation or other forms of non-binding alternate dispute resolution mutually acceptable to the parties.

#### ARTICLE IX - OPERATION MAINTENANCE AND REHABILITATION

a. After the completed project is turned over to the local sponsor by the Government, the local sponsor shall operate, maintain, repair, replace, and rehabilitate the project in accordance with regulations or directions prescribed by the Government.

b. The local sponsor hereby gives the Government a right to enter, at reasonable times and in a reasonable manner, upon land which it owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, repairing, maintaining, replacing, or rehabilitating the project. If an inspection shows that the local sponsor for any reason is failing to fulfill its obligations under this Agreement without receiving prior written approval from the Government, the Government will send a written notice to the local sponsor. If the local sponsor persists in such failure for 30 calendar days after receipt of the notice, then the Government shall have a right to enter, at reasonable times and in a reasonable manner, upon lands the local sponsor owns or controls for access to the project for the purpose of

completing, operating, repairing, maintaining, replacing, or rehabilitating the project. No completion, operation, repair, maintenance, replacement, or rehabilitation by the Government shall operate to relieve the local sponsor of responsibility to meet its obligations as set forth in this Agreement, or to preclude the Government from pursuing any other remedy at law or equity to assure faithful performance pursuant to this Agreement.

#### ARTICLE X - RELEASE OF CLAIMS

The local sponsor shall hold and save the Government free from all damages arising from the construction and operation of the project, except for damages due to the fault or negligence of the Government or its contractors.

#### ARTICLE XI - MAINTENANCE OF RECORDS

The Government and the local sponsor shall keep books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement to the extent and in such detail as will properly reflect total project costs. The Government and the local sponsor shall maintain such books, records, documents, and other evidence for a minimum of three years after completion of construction of the project and resolution of all claims arising therefrom, and shall make available at their offices at reasonable times, such books, records, documents, and other evidence for inspection and audit by authorized representatives of the parties to this Agreement.

#### ARTICLE XII - FEDERAL AND STATE LAWS

In acting under its rights and obligations hereunder, the local sponsor agrees to comply with all applicable Federal and State laws and regulations, including Section 601 of Title VI of the Civil Rights Act of 1964 (Public Law 88-352) and Department of Defense Directive 5500.II issued pursuant thereto and published in Part 300 of Title 32, Code of Federal Regulations, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

#### ARTICLE XIII - RELATIONSHIP OF PARTIES

The parties to this Agreement act in an independent capacity in the performance of their respective functions under this Agreement, and neither party is to be considered the officer, agent, or employee of the other.

#### ARTICLE XIV - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

#### ARTICLE XV - COVENANT AGAINST CONTINGENT FEES

The local sponsor warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the local sponsor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability, or, in its discretion, to add to the Agreement or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

#### ARTICLE XVI - TERMINATION OR SUSPENSION

a. If at any time the local sponsor fails to make the payments required under this Agreement, the Secretary of the Army shall terminate or suspend work on the project until the local sponsor is no longer in arrears or unless the Secretary determines that continuation of work on the project is in the interest of the United States. Any delinquent payment shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13-week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning to each additional 3-month period if the period of delinquency exceeds 3 months.

b. If the Government fails to receive annual appropriations in amounts sufficient to meet expenditures for the then-current fiscal year, the Government shall so notify the local sponsor. After 60 days either party may elect without penalty to terminate the Agreement or to suspend performance thereunder, and the parties shall proceed to wind up their activities relating to the project and proceed to a final accounting in accordance with Article VII.

## ARTICLE XVII- OBLIGATION OF FUTURE APPROPRIATIONS

Nothing herein shall constitute, or be deemed to constitute, an obligation of future appropriations by the legislature of the State of Maine.

## ARTICLE XVIII- NOTICES

a. All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally, given by prepaid telegram, or mailed by first-class (postage-prepaid), registered, or certified mail, as follows:

If to the local sponsor:

Commissioner Dana Connors  
Department of Transportation  
State of Maine  
State House, Station 16  
Augusta, Maine 04333

If to the Government:

Division Engineer  
New England Division  
Corps of Engineers  
424 Trapelo Road  
Waltham, Massachusetts 02254-9149

b. A party may change the address to which such communications are to be directed by giving written notice to the other in the manner provided in this section.

c. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at such time as it is personally delivered or on the third business day after it is mailed, as the case may be.

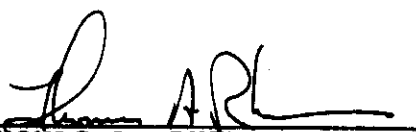
## ARTICLE XVIX - CONFIDENTIALITY

To the extent permitted by the law governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.



IN WITNESS WHEREOF, the parties hereto have executed  
this Agreement as of the day and year first above written.

THE DEPARTMENT OF THE ARMY

By:   
THOMAS A. RHEN  
Division Commander  
New England Division

Date: 24 August 88

STATE OF MAINE

  
Commissioner

Date: July 5, 1988

CERTIFICATION OF AUTHORITY

*Counsel I, Thomas Reeve*, do hereby certify that I am *DOT chief*  
~~Attorney General~~ of the State of Maine, and that I have  
reviewed the Agreement; that the State is legally constituted  
public body with full authority and legal capability to  
perform the terms of the agreement between the United States  
of America and the State of Maine in connection with the  
Perley Brook Streambank Erosion Control Project in Fort Kent,  
Maine, and to pay damages if necessary in the event of  
failure to perform in accordance with Section 221 of Public  
Law 91-611, and that the person who has executed the contract  
on behalf of the State of Maine has acted within this  
statutory authority.

IN WITNESS WHEREOF, I have made and executed this  
certificate this 1 day of July, 1987

*Thomas Reeve*  
~~Attorney General~~ *chief counsel, DOT*  
State of Maine

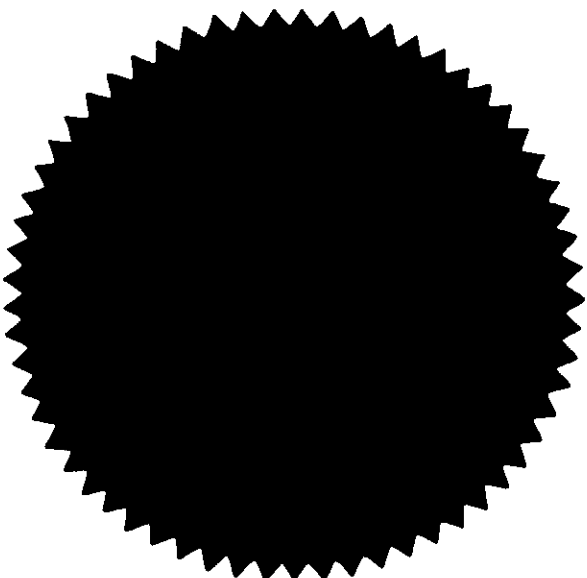
CERTIFICATION

I, Rodney S. Quinn, do hereby certify that I am the Secretary of the State of Maine, that Dana F. Connors who signed this Agreement on behalf of the State was there and then duly appointed and qualified Commissioner of the Department of Transportation that said Agreement was duly signed for and on behalf of the State of Maine by virtue of his authority as Commissioner and is within the scope of his statutory powers. I further certify that Thomas Reeves who approved the Agreement is the Attorney General for the State of Maine.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal of the State of Maine this 5th day of July 1988.

  
Secretary of State

(SEAL)



## ABILITY TO PAY ANALYSIS

Section 103(m) of the Water Resources Development Act of 1986 states that any cost sharing agreement for flood control made under the terms of Section 103 of the Act shall be subject to the ability of a non-Federal interest to pay. The Corps' implementation for Section 103m is published as Flood Control Cost Sharing Requirements Under the Ability to Pay Provision; Interim Final Rule (Vol. 52) Fed. Reg. (35872-35892) (1987) (to be codified at 33 C.F.R., Sections 241.1 - .6). This project does not qualify for a cost share reduction under Ability to Pay for the following reasons:

The estimated normal local cost share (flood control costs only) = 25%.

The ratio of flood control benefits to flood control costs 1.5.

The Benefits Based Floor =  $0.25 \times 2.1 = 0.375$ .

Convert to percentage = 37.5.

If the benefits based floor converted to a percentage is less than the normal cost share percentage, the ability to pay provisions apply. Since for this project, the normal local cost share is less than the Benefits Based Floor, there is no Ability to Pay cost share.

## TITLE 33-NAVIGATION AND NAVIGABLE WATERS

### Chapter II-Corps of Engineers War Department-Part 208-Flood Control Regulations Maintenance and Operation of Flood Control Works

(Retyped verbatim from  
original document)

Pursuant to the provisions of  
Section 3 of the Act of Congress  
approved June 22, 1936, as amend-  
ed and supplemented (49 Stat.  
1571; 50 Stat. 877; and 55 Stat. 638;  
33 U.S.C. 701c; 701c-1), the follow-  
ing regulations are hereby pre-  
scribed to govern the maintenance  
and operation of flood control  
works:

**208.10 Local flood protection  
works; maintenance and operation of  
structures and facilities-** (a) *General.*

(1) The structures and facilities  
constructed by the United States for  
local flood protection shall be con-  
tinuously maintained in such a man-  
ner and operated at such times and  
for such periods as may be neces-  
sary to obtain the maximum benefits.

(2) The State, political subdivi-  
sion thereof, or other responsible lo-  
cal agency, which furnished assu-  
rance that it will maintain and operate  
flood control works in accordance  
with the regulations prescribed by  
the Secretary of War, as required by  
law, shall appoint a permanent com-  
mittee consisting of or headed by an  
official hereinafter called the  
"Superintendent", who shall be re-  
sponsible for the development and  
maintenance of, and directly in  
charge of, an organization responsi-  
ble for the efficient operation and  
maintenance of all of the structures  
and facilities during flood periods  
and for continuous inspection and  
maintenance of the project works  
during periods of low water, all with-  
out cost to the United States.

(3) A reserve supply of materials  
needed during a flood emergency  
shall be kept on hand at all times.

(4) No encroachment or trespass  
which will adversely affect the effi-  
cient operation or maintenance of  
the project works shall be permitted  
upon the rights-of-way for the pro-  
tective facilities.

(5) No improvement shall be  
passed over, under, or through the  
walls, levees, improved channels or  
floodways, nor shall any excavation  
or construction be permitted within  
the limits of the project right-of-way,  
nor shall any change be made in any  
feature of the works without prior  
determination by the District

Engineer of the War Department or  
his authorized representative that  
such improvement, excavation, con-  
struction, or alteration will not ad-  
versely affect the functioning of the  
protective facilities. Such improve-  
ments or alterations as may be found  
to be desirable and permissible un-  
der the above determination shall be  
constructed in accordance with  
standard engineering practice.

Advice regarding the effect of pro-  
posed improvements or alterations  
on the functioning of the project and  
information concerning methods of  
construction acceptable under stan-  
dard engineering practice shall be  
obtained from the District Engineer  
or, if otherwise obtained, shall be  
submitted for his approval.

Drawings or prints showing such im-  
provements or alterations as finally  
constructed shall be furnished the  
District Engineer after completion of  
the work.

(6) It shall be the duty of the  
Superintendent to submit a semi-  
annual report to the District Engineer  
covering inspection, maintenance,  
and operation of the protective  
works.

(7) The District Engineer or his au-  
thorized representatives shall have  
access at all times to all portions of  
the protective works.

(8) Maintenance measures or re-  
pairs which the District Engineer  
deems necessary shall be promptly  
taken or made.

(9) Appropriate measures shall be  
taken by local authorities to insure  
that the activities of all local orga-  
nizations operating public or private  
facilities connected with the protec-  
tive works are coordinated with  
those of the Superintendent's or-  
ganization during flood periods.

(10) The War Department will fur-  
nish local interests with an Operation  
and Maintenance Manual for each  
completed project, or separate use-  
ful part thereof, to assist them in car-  
rying out their obligations under  
these regulations.

(b) *Levees-* (1) *Maintenance.* The  
Superintendent shall provide at all  
times such maintenance as may be  
required to insure serviceability of  
the structures in time of flood.  
Measures shall be taken to promote  
the growth of sod, exterminate bur-  
rowing animals, and to provide for  
routine mowing of the grass and  
weeds, removal of wild growth and  
drift deposits, and repair of damage  
caused by erosion or other forces.  
Where practicable, measures shall  
be taken to retard bank erosion by  
planting of willows or other suitable

growth areas riverward of the le-  
vees. Periodic inspections shall be  
made by the Superintendent to in-  
sure that the above maintenance  
measures are being effectively car-  
ried out and further, to be certain  
that:

(i) No unusual settlement, slough-  
ing, or material loss of grade or lev-  
ee cross-section has taken place;

(ii) No caving has occurred on ei-  
ther the land side or the river side of  
the levee which might affect the sta-  
bility of the levee section;

(iii) No seepage, saturated areas,  
or sand boils are occurring;

(iv) Toe drainage systems and  
pressure relief wells are in good  
working condition, and that such fa-  
cilities are not becoming clogged;

(v) Drains through the levees and  
gates on said drafters are in good  
working condition;

(vi) No revetment work or riprap  
has been displaced, washed out, or  
removed;

(vii) No action is being taken, such  
as burning grass and weeds during  
appropriate seasons, which will re-  
tard or destroy the growth of the  
sod;

(viii) Access roads to and on the  
levee are being properly maintained;

(ix) Cattle guards and gates are in  
good condition;

(x) Crown of levee is shaped so  
as to drain readily, and roadway  
thereon, if any, is well shaped and  
maintained;

(xi) There is no unauthorized graz-  
ing or vehicular traffic on the levees;

(xii) Encroachments are not being  
made on the levee right-of-way  
which might endanger the structure  
or hinder its proper and efficient  
functioning during times of emer-  
gency.

Such inspections shall be made  
immediately prior to the beginning of  
the flood season; immediately fol-  
lowing each major high water period,  
and otherwise at intervals not ex-  
ceeding 90 days, and such immedi-  
ate times as may be necessary to in-  
sure the best possible care of the  
levee. Immediate steps will be taken  
to correct dangerous conditions dis-  
closed by such inspections. Regular  
maintenance repair measures shall  
be accomplished during the appro-  
priate season as scheduled by the  
Superintendent.

(2) *Operation.* During flood peri-  
ods the levee shall be patrolled con-  
tinuously to locate possible sand  
boils or unusual wetness of the land-  
ward slope and to be certain that:

(i) There are no indications of  
slides or sloughs developing;

- (ii) Wave wash or scouring action is not occurring;
- (iii) No low reaches of levee exist which may be overtopped;
- (iv) No other conditions exist which might endanger the structure.

Appropriate advance measures will be taken to insure the availability to adequate labor and materials to meet all contingencies. Immediate steps will be taken to control any condition which endangers the levee and to repair the damaged section.

(c) *Flood walls* - (1) *Maintenance*. Periodic inspections shall be made by Superintendent to be certain that:

- (i) No seepage, saturated areas, or sand boils are occurring;
- (ii) No undue settlement has occurred which affects the stability of the wall or its water tightness;
- (iii) No trees exist, the roots of which might extend under the wall & offer accelerated seepage paths;
- (iv) The concrete has not undergone cracking, chipping, or breaking to an extent which might affect the stability of the wall or its water tightness;
- (v) There are no encroachments upon the right-of-way which might endanger the structure or hinder its functioning in time of flood;
- (vi) Care is being exercised to prevent accumulation of trash and debris adjacent to walls, and to insure that no fires are being built near them;
- (vii) No bank caving conditions exist riverward of the wall which might endanger its stability;
- (viii) Toe drainage systems and pressure relief wells are in good working condition, and that such facilities are not becoming clogged.

Such inspections shall be made immediately prior to the beginning of the flood season, immediately following each major high water period, and otherwise at intervals not exceeding 90 days. Measures to eliminate encroachments and effect repairs found necessary by such inspections shall be undertaken immediately. All repairs shall be accomplished by methods acceptable in standard engineering practice.

(2) *Operation*. Continuous patrol of the wall shall be maintained during flood periods to locate possible leakage at monolith joints or seepage underneath the wall. Floating plant or boats will not be allowed to lie against or tie up to the wall. Should it become necessary during a flood emergency to pass anchor cables over the wall, adequate measures shall be taken to protect

the concrete and construction joints. Immediate steps shall be taken to correct any conditions which endanger the stability of the wall.

(d) *Drainage structures* - (1) *Maintenance*. Adequate measures shall be taken to insure that inlet and outlet channels are kept open and that trash, drift, or debris is not allowed to accumulate near drainage structures. Flap gates and manually operated gates and valves on drainage structures shall be examined, oiled, and trial operated at least once every 90 days. Where drainage structures are provided with stop log or other emergency closures, the condition of the equipment and its housing shall be inspected regularly and a trial installation of the emergency closure shall be made at least once each year. Periodic inspections shall be made by the Superintendent to be certain that:

- (i) Pipes, gates, operating mechanisms, riprap, and headwalls are in good condition;
- (ii) Inlet and outlet channels are open;
- (iii) Care is being exercised to prevent the accumulation of trash and debris near the structures in that no fires are being built near bituminous coated pipes;
- (iv) Erosion is not occurring adjacent to the structures which might endanger its water tightness or stability.

Immediate steps will be taken to repair damage, replace missing or broken parts, or remedy adverse conditions disclosed by such inspections.

(2) *Operation*. Whenever high water conditions impede, all gates will be inspected a short time before water reaches the invert of the pipe and any object which might prevent closure of the gate shall be removed. Automatic gates shall be closely observed until it has been ascertained that they are securely closed. Manually operated gates and valves shall be closed as necessary to prevent inflow of flood water. All drainage structures and levees shall be inspected frequently during floods to ascertain whether seepage is taking place along the lines of their contact with the embankment. Immediate steps shall be taken to correct any adverse conditions.

(e) *Closure structures* - (1) *Maintenance*. Closure structures for the traffic openings shall be inspected by the Superintendent every 90 days to be certain that:

- (i) No parts are missing;
- (ii) Metal parts are adequately covered with paint;
- (iii) All moveable parts are in satisfactory working order;
- (iv) Proper closure can be made promptly when necessary;
- (v) Sufficient materials are on hand for the erection of sandbag closures and that the location of such materials will be readily accessible in times of emergencies.

Tools and parts shall not be removed for other use. Trial erections of one or more closure structures shall be made once each year, alternating the structures chosen so that each gate will be erected at least once in each three-year period. Trial erections of all closure structures shall be made whenever a change is made in key operating personnel. Where railroad operation makes trial erection of a closure structure in feasible, rigorous inspection and drill of operating personnel may be substitute therefore. Trial erection of sandbag closures is not required. Closure materials will be carefully checked prior to and following flood periods, and damaged or missing parts shall be repaired or replaced immediately.

(2) *Operation*. Erection of each moveable closure shall be started in sufficient time to permit completion before flood waters reach the top of the structure sill. Information regarding the proper method of erecting each individual closure structure, together with an estimate of the time required by an experienced crew to complete its erection will be given in the Operation and Maintenance Manual which will be furnished local interests upon completion of the project. Closure structures will be inspected frequently during flood periods to ascertain that no undue leakage is occurring and that drains provided to care for the ordinary leakage are functioning properly. Boats or floating plant shall not be allowed to tie up to closure structures or to discharge passengers or cargo over them.

(f) *Pumping plants*

(1) *Maintenance*. Pumping plants shall be inspected by the Superintendent at intervals not to exceed 30 days during flood seasons and 90 days during off-flood seasons to insure that all equipment is in order for instant use. At regular intervals, proper measures shall be taken to provide for cleaning plant, buildings, and equipment, repainting as necessary, and lubricating all machinery. Adequate supplies of lubri-

cants for all types of machine, fuel for gasoline or diesel powered equipment, and flashlights or lanterns for emergency lighting shall be kept on hand at all times. Telephone service shall be maintained at pumping plants. All equipment, including switch gear, transformers, motors, pumps, valves, and gates shall be trial operated and checked at least once every 90 days. Megger tests of all insulation shall be made whenever wiring has been subject to undue dampness and otherwise at intervals not to exceed one-year period. A record shall be kept showing the results of such test period. Wiring disclosed to be in an unsatisfactory condition by such tests shall be brought to a satisfactory condition or shall be properly replaced. Diesel and gasoline engines shall be started at such intervals and allowed to run for such length of time as may be necessary to insure their service ability in times and emergencies. Only skilled electricians and mechanics shall be employed on test and repairs. Operating personnel for the plant shall be present during tests. Any equipment removed from the station for repair or replacement shall be repaired or replaces as soon as practicable and shall be trial operated after reinstallation. Repairs requiring removal of equipment from the plant shall be made during off-flood seasons insofar as practicable.

(2) *Operation.* Competent operators shall be on duty at pumping plants whenever it appears that necessity for pump operation is imminent. The operator shall thoroughly inspect, trial operate, and place in readiness all plant equipment. The operator shall be familiar with the equipment manufacturers' instructions and drawings and with the "Operating Instructions" for each station. The equipment shall be operated in accordance with the above hyphenated mentioned "Operation Instructions" and care shall be exercised at proper lubrication is being supplied all equipment, and that no overheating, undue vibration or noise is occurring. Immediately upon final recession of flood waters, the pumping station shall be thoroughly cleaned, pumphouse sumps flushed, and equipment thoroughly inspected, oiled and greased. A record or log of pumping plant operation shall be kept for each station, a copy of which shall be furnished to the District Engineer following each flood.

(g) *Channels and Floodways -*

(1) *Maintenance.* Periodic inspections of improved channels and floodways shall be made by the Superintendent to be certain that:

- (i) The channel or floodway is clear of debris, weeds, and wild growth;
- (ii) The channel or floodway is not being restricted by the depositing of waste material, building of unauthorized structures or encroachments;
- (iii) The capacity of the channel or floodway is not being reduced by the formation of shoals;
- (iv) Banks are not being damaged by rain or wave wash, and that no sloughing of banks has occurred;
- (v) Riprap sections and deflection dikes and walls are in good condition;
- (vi) Approach and egress channels adjacent to the improved channel or floodway are sufficiently clear of obstructions and debris to permit proper functioning of the project works.

Such inspections shall be made prior to the beginning of the flood season and otherwise intervals not to exceed 90 days. Immediate steps will be taken to remedy any adverse conditions disclosed by such inspections. Measures will be taken by the Superintendent to promote the growth of grass on bank slopes and earth deflection dikes. The Superintendent shall provide for periodic repair and cleaning of debris basins, check dams, and related structures as may be necessary.

(2) *Operations.* Both banks of the channel shall be protrolled during periods of high waters and measures shall be taken to protect those reaches being attacked by the current or by wave wash. Appropriate measures shall be taken to prevent the formation of jams of ice or debris. Large objects which become lodged against the bank shall be removed. The improved channel or floodway shall be thoroughly inspected immediately following each major high water period. As soon as practicable thereafter, all snags and other debris shall be removed and all damage to the banks, riprap, deflection dikes and walls, drainage outlets, or other flood control structures repaired.

(h) *Miscellaneous Facilities - (1) Maintenance.* Miscellaneous structures and facilities constructed as part of the protective works and other structures and facilities which function as a part of, or affect the efficient functioning of the protective works, shall be periodically inspected by the Superintendent and the

appropriate maintenance measures taken. Damaged or unserviceable parts shall be repaired or replaced without delay. Areas used for ponding in connection with pumping plants or for temporary storage of interior runoff during flood period shall not be allowed to become filled with silt, debris, or dumped material. The Superintendent shall take proper steps to prevent restriction of bridge openings and, where applicable, shall provide temporary raising during floods of bridges which restrict channel capacities during high flows.

(2) *Operation.* Miscellaneous facilities shall be operated to prevent or reduce flooding during periods of high water. Those facilities constructed as part of the protective works shall not be used for purposes other than flood protection without approval of the District Engineer unless design therefore.

(49 Stat. 1571, 50 Stat. 877; and 55 Stat. 638; 33 U.S.C. 701c; 701c-1) (Regs. 9 August 1944, CE SPEWF)

[SEAL] J.A. ULIO

Major General

The Adjutant General

[F.R. Doc 44-12255; Filed, August 16, 1944; 9:44 a.m.]

**APPENDIX B**

**ASSURANCES OF LOCAL  
COOPERATION**



**APPENDIX C**

**INSPECTION REPORT FORMS**

DESIGNATION OF SUPERINTENDENT

Name Of Project: \_\_\_\_\_

Location: \_\_\_\_\_

MAINTAINING MUNICIPAL AGENCY:

Agency: \_\_\_\_\_

Address: \_\_\_\_\_ Tel. No. \_\_\_\_\_

"SUPERINTENDENT" - as required by Section 208.10 (a) (2), Chap II,  
Title 33 USC

Name & Title: \_\_\_\_\_

Employed by: \_\_\_\_\_

Business Address: \_\_\_\_\_

Business Tel. No: \_\_\_\_\_

Nights, Sundays, Address: \_\_\_\_\_

Nights, Sundays, Tel. No: \_\_\_\_\_

Remarks:

Signed \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

NOTE: To be submitted and updated as necessary by the responsible agency which will maintain and operate the works in accordance with regulations prescribed by the Secretary of the Army as required by law (Title 33, Chap. 208, Sec II, USC).

# LOCAL FLOOD PROTECTION PROJECT INSPECTION REPORT

**Project:**

Maintaining Agency:

Type Inspection: \_\_\_\_\_ Semi-Annual Staff \_\_\_\_\_ 90 Day Interim

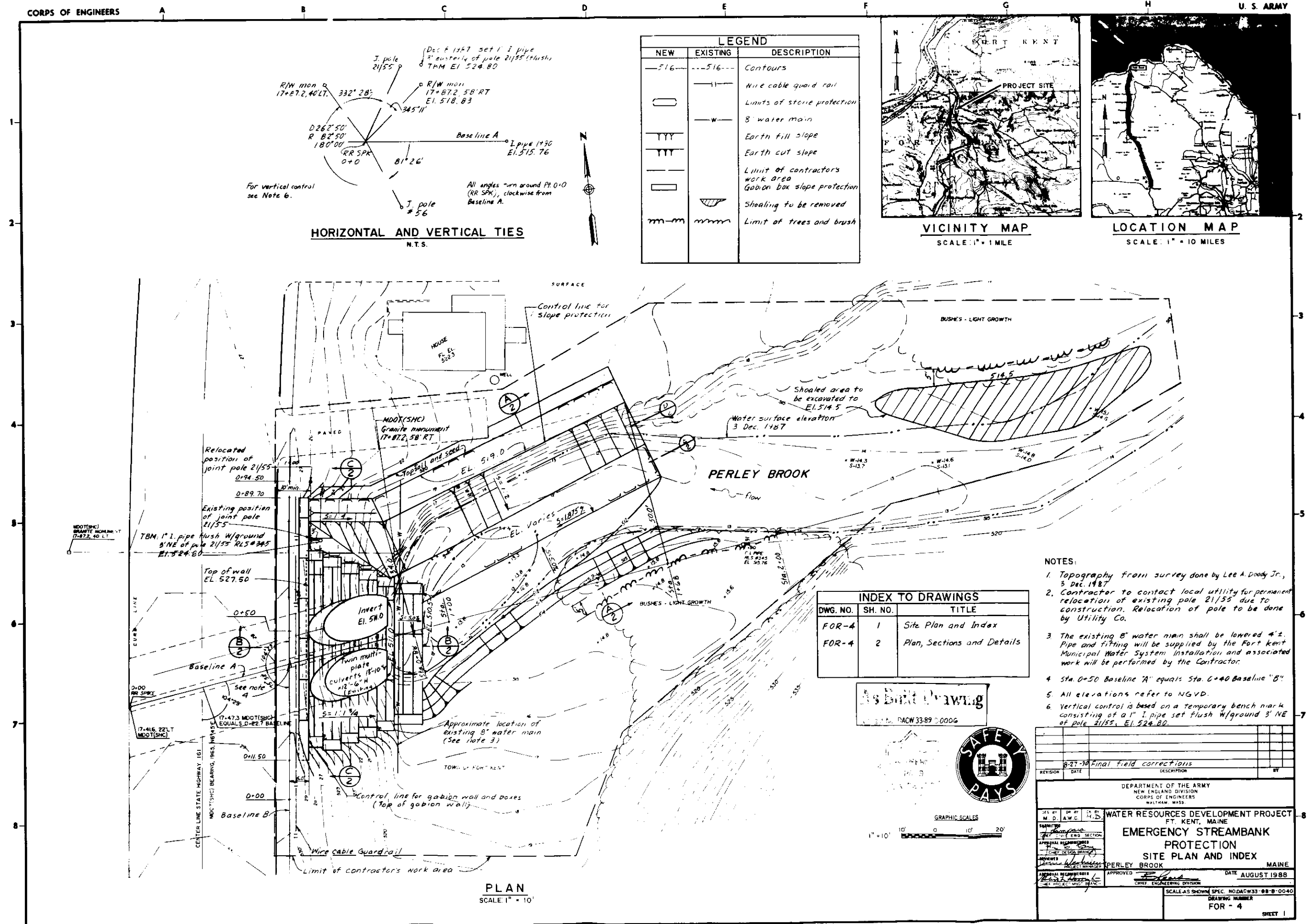
River Basin: \_\_\_\_\_ Date of Inspection

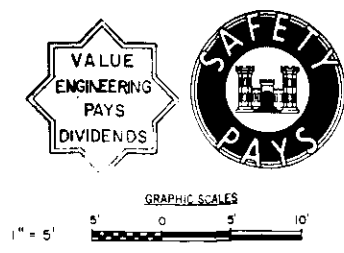
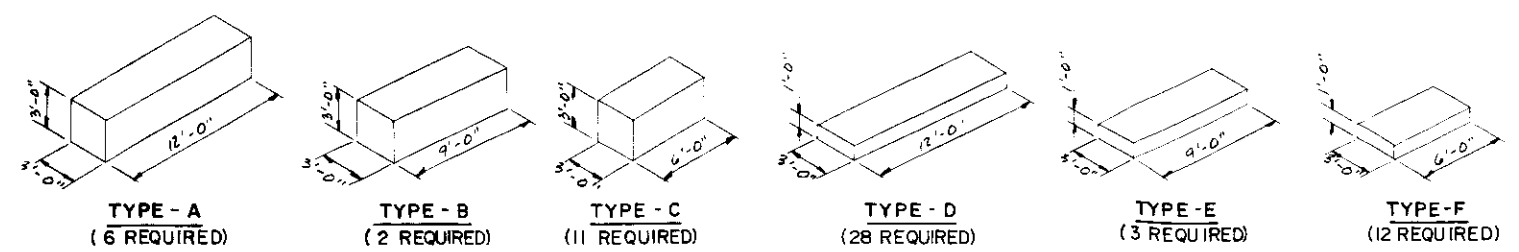
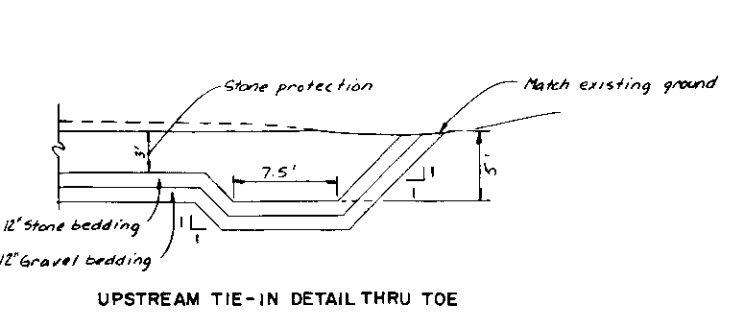
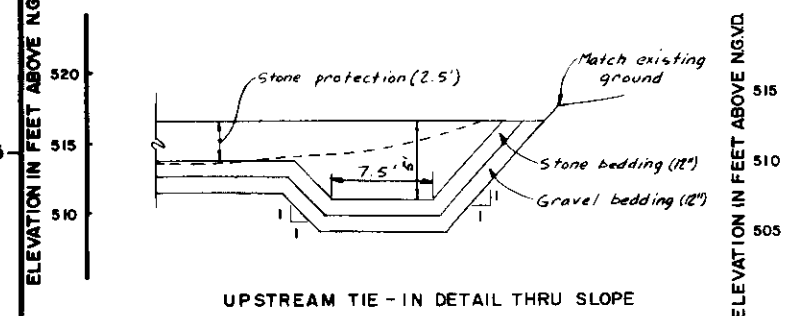
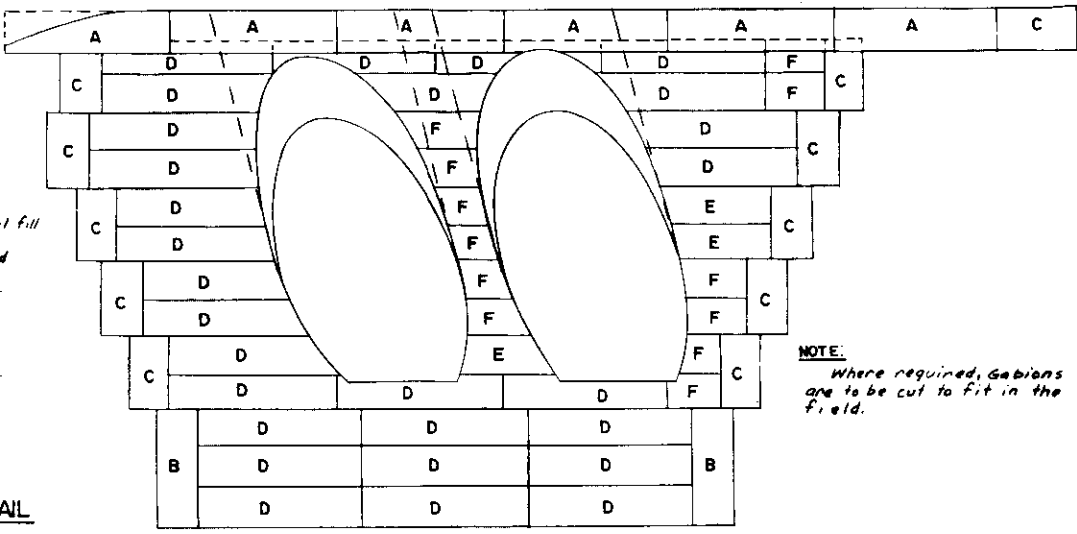
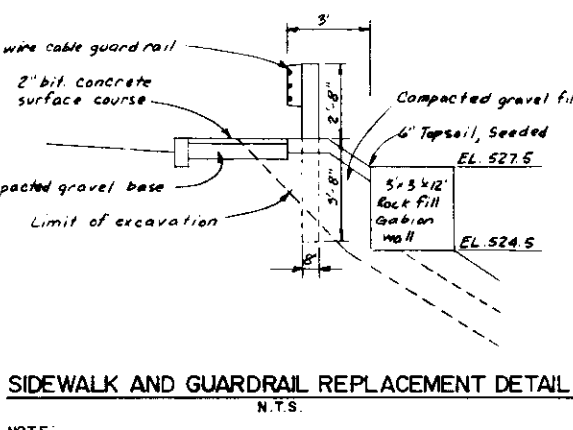
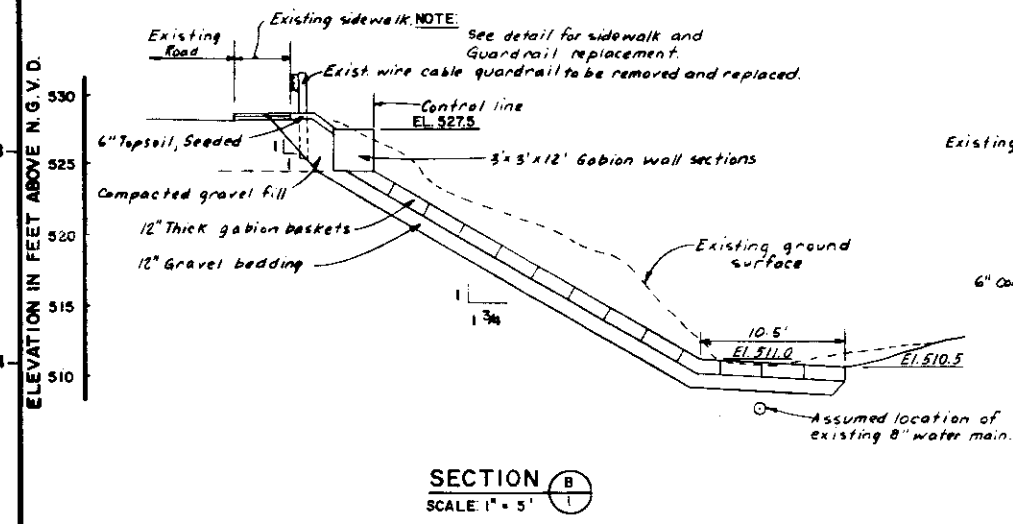
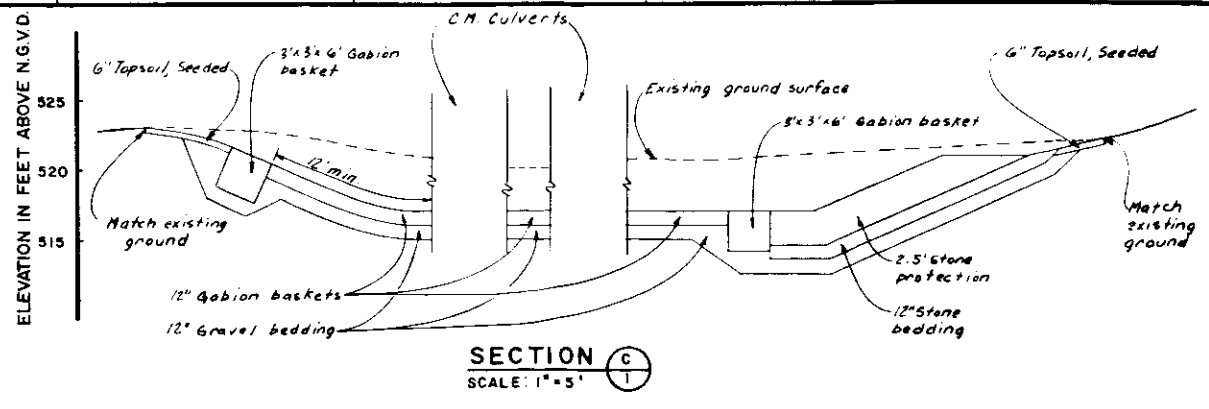
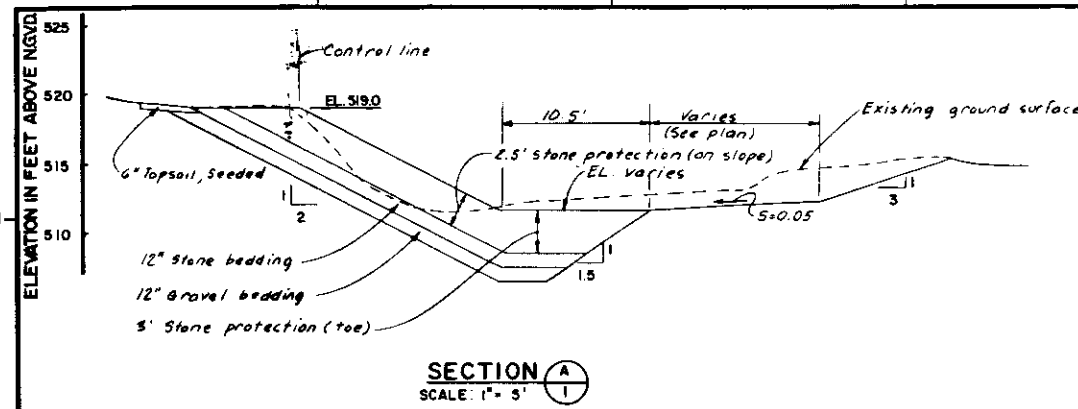
Feature	Sht	Unsat	Deficiencies
<b>PUMPING STATIONS - STRUCTURES</b>			
INTERIOR			
EXTERIOR			
<b>PUMPS - MOTORS - ENGINES</b>			
TRIAL OPERATED			
GENERAL CONDITION			
POWER SOURCE			
INSULATION TESTS			
METAL INTAKES/OUTLETS			
GATE VALVES			
<b>GATES - DRAINAGE STRUCTURES</b>			
TRIAL OPERATED			
GENERAL CONDITION			
LUBRICATION			
<b>DIKES - DAMS</b>			
GENERAL CONDITION			
SLOPES/EROSION			
SAND BOILS/CAVING			
TRESPASSING			
SLOPE PROTECTION			
DRAINS			
<b>STOP-LOGS - LOG BOOM</b>			
CONDITION OF LOGS			
AVAILABILITY OF LOGS			
HIGHWAY SLOTS			
STORAGE FACILITIES			
<b>CHANNELS - OUTLET WORKS CHANNEL</b>			
BANKS			
OBSTRUCTION CONTROL			

Feature	Sat	Unsat	Deficiencies
<b>CONCRETE STRUCTURES</b>			
SURFACE			
SETTLEMENT			
JOINTS			
DRAINS			
<b>MISCELLANEOUS</b>			
EMERGENCY OPER. PLAN			
EMERGENCY EQUIPMENT			
SEMI-ANNUAL REPORT			
<b>Inspection Party:</b>          <b>Photographs Taken:</b>          <b>Remarks &amp; Additional Comments:</b> ( Indicate Here Observations, Discussions, Specific Feature Deficiencies, Recommendations and any other pertinent information. Use Continuation Sheet if necessary.)			
X ALL APPLICABLE ITEMS. IF UNSAT INDICATE SPECIFIC DEFICIENCIES. INDICATE IF NOT APPLICABLE.			
DATE	INSPECTED BY: TYPED NAME & TITLE		SIGNATURE

**APPENDIX D**

**AS-BUILT DRAWINGS**





**As Built Drawing**  
Contract No. DACW33-89C-0006

REVISION	DATE	DESCRIPTION	BY

DEPARTMENT OF THE ARMY  
NEW ENGLAND DIVISION  
CORPS OF ENGINEERS  
WALTHAM, MASS.

DES BY: M.D. R.F.E. M.D.  
SUBMITTED: 10/1/88  
APPROVAL RECOMMENDED: [Signature]  
APPROVED: [Signature]  
DATE: AUGUST 1988

WATER RESOURCES DEVELOPMENT PROJECT  
FT. KENT, MAINE  
**EMERGENCY STREAMBANK PROTECTION**  
PLAN, SECTIONS AND DETAILS  
MAINE  
PERLEY BROOK  
CHIEF, ENGINEERING DIVISION

SCALE: AS SHOWN SPEC. NO. DACW33-88-2-0040  
DRAWING NUMBER  
FOR - 4  
SHEET 2